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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,058	08/31/2000	James A. Baldwin	14531.65	2972

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EXAMINER

NATNAEL, PAULOS M

ART UNIT PAPER NUMBER

2614

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,058

Applicant(s)

BALDWIN ET AL.

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,11,15 and 16 is/are rejected.
- 7) ☒ Claim(s) 3-5,7-10,12-14 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1, 11, 15,16** are rejected under 35 U.S.C. 102(e) as being anticipated by Katto, U.S. Pat. No. 6,072,832.

Considering claim 1, Katto discloses all claimed subject matter, note;

a) an act of receiving a digital video signal and a digital audio signal, is met by Demultiplexer 101, fig.1;

b) an act of extracting a plurality of digital video packets from the digital video signal, is met by Demultiplexer 101, fig.1;

c) an act of extracting a plurality of digital audio packets from the digital audio signal, is met by Demultiplexer 101, fig.1;

d) an act of using a video clock to control the timing of the presentation of the video information represented by the plurality of digital video packets, is met by video PLL 108, fig.1;

e) an act of using an audio clock to control the timing of the presentation of the audio information represented by the plurality of digital audio packets, wherein the audio clock operates separately and independently of the video clock, is met by audio PLL 103, fig.1;

Considering claim 11, Katto discloses all claimed subject matter, note;

a) an act of using a video clock to control the timing of the presentation of the video information, is met by video PLL 108, fig.1;

b) an act of, separately and independently of the video clock, using an audio clock to control the timing of the presentation of the audio information, is met by audio PLL 103, fig.1;

Considering claim 15. In a digital receiver that is configured to receive a digital video signal representing a plurality of digital video packets and a digital audio signal representing a plurality of digital audio packets, a method of independently timing the presentation of the video information of the digital video packets with respect to the timing of the presentation of the audio information of the digital audio packets so that the video information and the audio information may be accurately timed even if they are from different unrelated programs, the method comprising the following:

- a) an act of receiving a digital video signal and a digital audio signal;
- b) an act of extracting a plurality of digital video packets from the digital video to signal;
- c) an act of extracting a plurality of digital audio packets from the digital audio signal; and
- d) a step for independently controlling a video clock that controls the timing of the video presentation speed of the plurality of digital video packets, and an audio clock that controls the timing of the audio presentation speed of the plurality of digital audio;

See rejection of claim 1;

Considering claim 16,

- a) an act of using a video clock to control the timing of the presentation of the video information represented by the plurality of digital video packets; and
- b) an act of using an audio clock to control the timing of the presentation of the audio information represented by the plurality of digital audio packets, wherein the audio clock operates separately and independently of the video clock.

See rejection of claim 11;

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katto U.S. Pat. No. 6,072,832.

Considering claim 2, an act of **adding a local video time** stamp to a digital video packet at a substantially constant time period, packet to packet, after the receiver

receives the digital video packet, an act of comparing a program clock reference within the digital video packet to the local video time stamp.

Katto discloses that the “demultiplexer 101 separates a bit stream in which an audio signal, a video signal, and computer graphics data are compressed and multiplexed, into a compressed audio signal stream, a time stamp, the SCR (System Clock Reference) or PCR (Program Clock Reference) of the audio signal, a compressed video signal stream, a time stamp, the SCR or PCR of the video signal, and a compressed computer graphics data stream.” (col. 6, lines 42-50)

However, adding a local time stamp to the received signal is well known in the art, which is referred as **Decoding Time stamp (DTS)**.

Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Katto by providing a DTS locally in order for the system to be able to better synchronize the received data (audio and video signal) more efficiently and quickly, so the presentation of the signals would be accurate.

Considering claim 6,

- a) an act of adding a local audio time stamp to a digital audio packet at a substantially constant time period packet to packet after the receiver receives the digital audio packet; and
- b) an act of comparing a program clock reference within the digital audio packet to the local audio time stamp.

See rejection of claim 2;

Allowable Subject Matter

5. Claims 3-5,7-10, 12-14, and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose a method of independently timing the presentation of the video information of the digital video packets with respect to the timing of the presentation of the audio information of the digital audio packets

wherein the act of using a video clock to control the timing of the presentation of the video information represented by the plurality of digital video packets comprises an act of controlling the speed of the video clock based on the

comparison of the program clock reference to the local video time stamp, as in claim 3;

wherein the act of using an audio clock to control the timing of the presentation of the audio information represented by the plurality of digital audio packets comprises an act of controlling the speed of the audio clock based on the comparison of the program clock reference to the local audio time stamp, as in claim 7.

wherein the computer-executable instructions for performing the act of using a video clock to control the timing of the presentation of the video information comprises computer-executable instructions for performing the following:
an act of comparing the local time at the digital receiver with a program clock reference within one of the digital video packets; an act of **slowing down** the video clock if the comparison indicates that the presentation of the video information is ahead of schedule; an act of **speeding up** the video clock if the comparison indicates that the presentation of the video information is behind schedule, as in claims 12 and 17.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

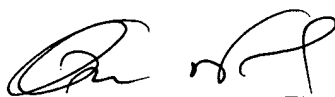
8. Noda et al. U.S. Pat. No. 5,784,119 discloses video decoding device for decoding video data in synchronism with a system clock.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN
June 18, 2004


PAULOS M. NATNAEL
PATENT EXAMINER